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Review of Literature

"INFORMATION COMMUNICATION TECHNOLOGY (ICT) SKILLS AMONG LIBRARIANS IN THE ENGINEERING COLLEGE LIBRARIES IN JAIPUR: A STUDY"

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ABSTRACT

The study conducted to investigate the awareness, skill and attitude towards Information and Communication Technologies(ICT) amongst librarians within the study is based totally on a questionnaire survey of Librarians employed in the libraries of the analyses revealed that the librarians inside the library have tremendously average degree skills in various ICT related tasks in libraries. All of the Librarians expressed a fine attitude closer to the application of ICT in libraries.

KEYWORDS :Information and Communication Technologies (ICT) skills; Attitude; Librarians; Engineering College Libraries in Jaipur.

1. INTRODUCTION

Information and Communication Technology (ICT) is a term that has diverse meanings. ICT refers to technology that provides access to information through telecommunications. In keeping with Seenivasulu ICT skills or IT skills can be known as the general abilities (understanding, knowledge, skills and attitudes) important to create, store, examine, arrange, retrieve and disseminate digital information (text, photographs, sounds) in digital libraries or any type of information. In recent years, work for the information profession has turn out to be characterized by fast-paced trade and new abilities necessities. ICT has provided library with new opportunities to improve their sources and offerings.

Within the early Seventies library automation strategies have been started to automate and

smoothen the workflow of the library services. Inside the past due Nineties, Internet changed this automation process with the emergence of web based totally services. Inside the closing 8-10 years, the Web 2.0 has revolutionized information communication with the aid of faster information sharing, networking and allowing multimedia services. The evolution of social sharing has compelled libraries to undertake this era of their habitual services to satisfy consumer's expectancies and reap immediate information delivery. Information professionals are now anticipated to be conscious and capable of the use of and demonstrating rising ICTs. Software of ICT is posing a particular project to Librarians in developing countries. There may be need for extra education to reinforce the conventional talents so that it will expand competency in ICT use. These issues make it vital to have a look at the ICT skills needed for the information professionals in this changing situation. Here strive has made to assess the Information and Communication Technology (ICT) skills among Librarians in the Engineering college libraries in Jaipur.

2.REVIEW OF LITERATURE

Literature establishes that a number of studies have been conducted to explore needed competencies of librarians to meet the challenges of digital age.

Adomi E. E. and Anie S. O. (2006), check the PC literacy skills of professional librarians in Nigerian college Libraries. Outcomes revealed that a majority of the librarians aren't yet very capable in computer use. 86 % of library professionals have taken gain of training and consultancy programmes. Electric powered power deliver and connectivity issues are the primary constraints diagnosed via 73.7% of professionals.

Babu B. R. Vinayagamoorthy, P and Gopalakrishnan S. (2007), in a take a look at determined that the librarians of those commands have obtained fundamental competencies in ICT, however they lacked knowledge about community-primarily based offerings and digital library the various engineering college library experts in Tamil have knowledge in pc fundamentals, 81.07% in net, 42.68% in multimedia and best a totally few professionals 29.26 % have understanding in pc programming.

Haneefa M. K. and Shukkoor C. K. A. (2010)) highlighted the ICT literacy most of the library specialists of Calicut university. The questionnaire survey discovered that the use of ICT based totally sources and services, library automation software program, and standard reason utility software program is high the various professional Assistants than the Junior Librarians and assistant Librarians. In a look at of ICT skills amongst librarians in engineering educational institutions in Tamil Nadu,

Kattimani S. F. and Naik R. R. (2013), in a study at the librarianship, ICT skills, and constraints to gather ICT skill of library professionals working in the engineering college 'libraries in Karnataka state. A dependent questionnaire changed into used to gather facts. Results confirmed that deputy librarian and librarian and librarian class showed exceedingly high skill in ICT associated duties as compared to assistant librarian, library assistant and others. Results additionally showed that work overload of the professionals (80.2%) are the maximum vital constraint in obtaining ICT skills.

Kumar K. (2013) highlighted the standards of literacy, information and communication technology ICTs and its motive, scope and appropriateness amongst library specialists inside the 21st century. They recognized the areas wherein the ICTs may be implemented in library and facts centers and talked about numerous approaches to make library professionals ICT literate.

Kumar K. (2013), expertise on ICT skills among LIS professionals of engineering institutions of Andhra Pradesh state. The results showed that, in regards to working structures, librarians possess focus on windows with Weight arithmetic Mean of 20.4% and UNIX 8.4% and for software programs they possess attention as 20.53% for MS-word observed by MS-Excel 19.53% writer concluded with

thought that the educational universities providing publications in LIS need to trade their syllabus focusing greater on ICT's and supplying practical training to gain information in ICT skills.

Mathew S. K. and Baby M. D. (2012), in their study of technological skills for academic librarians among University libraries in Kerala, determined that ICT based offerings are being provided by means of a small organization of skilled library experts or computer experts and majority of the certified library professionals don't get an possibility to be familiar with ICT services or they're generally unaware of the facilities of their personal institutions. The take a look at additionally discovered that an awesome majority (88.6%) of the library specialists is professional in skilled in operating systems windows and management of electronic sources in all fairness recognized to 51.9% of professionals. among web2.0 technologies, electronic mail/instantaneous messaging or chat changed into frequently utilized by 85.9% of professionals, and Wikis changed into often used by 69.1%.

Satapthy S. K. and Maharana R. K. (2012), studied the ICT skills of LIS professionals in engineering institutions of Orissa maximum quantity of respondents have expertise of LibSys automation software 62.13%. The analysis additionally found out that the most of the professionals own knowledge of e mail, accompanied be e-useful resource, search engines like Google and yahoo and use of OPAC. Approximately 78% of the respondents indicated that the primary technique of acquiring ICT talents is by using formal education and 95.58% answered the primary constraint to competencies acquisition was the tight operating agenda.

Seena and Pillai (2014) the study was conducted to investigate the awareness, skill and attitude towards Information and Communication Technologies (ICT) among library professionals in Kerala University Library. The study based on a questionnaire survey of library professionals employed in the central and department libraries of the University of Kerala.

Singh K. P., Sharma N and Negi N. (2009), Availability, use and boundaries of ICT in Library and Information Centers in Noida. The data was accumulated through a dependent questionnaire from 25 LICs. It's far located from the consequences that majority of the LICs of Noida have simple hardware, software program, net offerings, OPAC, and SDI. The main barrier to ICT programs in libraries is discovered as the lack of understanding, hobby and initiation of library experts in the direction of ICT application. The librarians showed their fine mindset closer to the software/use of ICT in their libraries. In a take a look at on effect of ICT on Library staff schooling.

Sivakumaren K. S, Jeyaprakash B, Gopalakrishnan S and Geetha V. (2011) in a paper examined the various attitudes of library professionals on ICT in the libraries. The questionnaire method was used to collect data from the respondents working in universities and colleges in Channai. The study discovered that the majority of library professionals have positive attitude on ICT and a number of them had been on ICT.

Talab S M G. and Tajafari M. (2012) compared the impact of ICT on training of library human resources in university libraries of India and Iran. Data collection was made by using e-mail questionnaire. The finding showed that each Indian and Iranian library staffs consider that introduction of ICT in libraries has created a need for training. Library staffs from Iran have perceived the effect of ICT on their training wishes extra than their Indian opposite numbers. The item concludes with the view that university libraries in both nations need to get their library group of workers trained in ICT.

Tiwari B. K. and Sahoo K C. (2011) attempted to reveal the ICT infrastructure in the university libraries of Madhya Pradesh based on librarians' View. Questionnaire and statement methods had been used to acquire statistics for the study. The consequences showed that not one of the university libraries have unbiased website, however all university libraries use universities internet site for display of records approximately the library. All university libraries of the state have local Area Network (LAN)

and Internet while Campus Wide Area Network (CWN) is available in 62.5% university libraries.

3.OBJECTIVE OF THE STUDY

1)To evaluate the level of different types of ICT skills possessed by the Librarians
2)To evaluate the attitude of Librarians towards the application of ICT in Engineering college libraries in Jaipur
3)To identify the constraints in acquiring ICT skills by Librarians under study

4.RESEARCH METHODOLOGY

The study is based on a questionnaire survey of Librarians working in the engineering college libraries of Jaipur. A prepared questionnaire was designed to collect data keeping in mind the basic objectives of the study. The questionnaire consists of both optional type questions. The collected data was analyzed using MS-Excel for appropriate statistical analysis and description.

The study includes the Librarians of the engineering college libraries. The study is confined to the Librarians. The data collected through the questionnaires was scrutinized, classified, and tabulated for better understanding and clarity. The collected data were entered into Microsoft Excel spread sheet for further analysis. The first part of the questionnaire is structured to get information of variables like age group, qualification designation, experience, etc.

5.LIMITATIONS

As discussed earlier, there are 45 Engineering colleges out of 51 have been covered under the study from Jaipur district in Rajasthan state. This study will be limited to Engineering college libraries, well established till year 2010, affiliated to Rajasthan Technical University (RTU), Kota, Approved by All India Council of Technical Education (AICTE) New Delhi, is an apex body at the centre, which controls all these Engineering colleges.

- The study did not compare the ICT skills among the male and female librarians.
- The study did not attempt to compare the ICT skills of the librarians by the nature of management.

6.Data Analysis

Table-1 Age and gender-wise distribution of respondents

Sr No.	Age Group	No of respondents	Percentage
1	Below 25	4	10
2	26-35	13	32.5
3	36-45	21	52.5
4	Above 46	2	5
	Total	**40**	**100**

Table 1 indicates that maximum of the Librarians age group between 36 and 45 years (52.5%) on the time of survey, best 32.5% of the Librarians are under 35 years of age, only 5% of librarians are above 45 years of age and only 10% of librarians are under 25 year of age.

Table 2 Basic qualification of respondents

Sr No.	Qualifications	No of respondents	Percentage
1	BA	17	42.5
2	MA	16	40
3	BSC	4	10
4	MSC	1	2.5
5	BCOM	1	2.5
6	MCOM	1	2.5
	Total	**40**	**100**

Table 2 indicates that basic qualification of Librarians underneath the study. It becomes found that 42.5% of the respondents have a B.A. degree in their basic subject and 40% of the respondents have M. A. Degree. Only a few respondents have B.Sc. 10%, M.Sc. 2.5, B. Com and only 2.5% have M. Com. Degree.

Table-3 Professional qualifications of respondents

Sr No.	Qualifications	No of respondents	Percentage
1	Ph.D	3	7.5
2	M.Phil	5	12.5
3	UGC NET	1	2.5
4	M.Lib.Sc.	27	67.5
5	B.Lib.Sc.	3	7.5
6	D.Lib.Sc.	1	2.5
7	C.Lib.Sc	0	0
	Total	**40**	**100**

Table 3 indicates that the Librarians the engineering colleges library of Jaipur have high average of professional qualification. It could be visible that Librarians having most effective B. Lib. Sc. Degree is 7.5%, at the same time as 67.5% of Librarians have M. Lib. Sc., 12.5% have M. Phil. levels, and 7.5% are Ph. D.

Table-4 Professional experience of respondents

Sr No.	Experience	No of respondents	Percentage
1	Below 5 Year	6	15
2	6-15	27	67.5
3	16-25	6	15
4	Above 26 Year	1	2.5
	Total	**40**	**100**

Table 4 offers the overall experience of the librarians. Out of 40 respondents 27 librarians have experience ranging 6-15 years and 15 librarians have 16-25 years of experience. Some 2.5% have above 26 years and 15% has below 5 years of experience.

Extent of different types of ICT Skills

Table-5 Awareness of ICT based applications

Sr No	Technology	Excellent	Good	Poor	Don't Know	Don't Use	Total
1	Windows	31	8	1	0	0	40
	%	77.5	20	2.5	0	0	100
2	MS-Office	25	14	0	1	0	40
	%	62.5	35	0	2.5	0	100
3	Technical Processing and Barcode Technology	22	9	2	6	1	40
	%	55	22.5	5	15	2.5	100
4	Electronics DDC	12	17	3	3	5	40
	%	30	42.5	7.5	7.5	12.5	100
5	Front Page Web Design	6	6	7	13	8	40
	%	15	15	17.5	32.5	20	100
6	Create Metadata	5	15	5	12	3	40
	%	12.5	37.5	12.5	30	7.5	100
7	Installation and customization of software	6	27	4	3	0	40
	%	15	67.5	10	7.5	0	100
8	MYSQL DBMS	6	1	9	18	6	40
	%	15	2.5	22.5	45	15	100
9	RFID Technology	10	19	5	3	3	40
	%	25	47.5	12.5	7.5	7.5	100
10	Digital and Virtual Library	14	16	5	4	1	40
	%	35	40	12.5	10	2.5	100
11	OPAC	16	19	4	0	1	40
	%	40	47.5	10	0	2.5	100
12	Accessing e-Information sources through consortia	9	20	5	5	1	40
	%	22.5	50	12.5	12.5	2.5	100

Table 5 shows presents the respondent's level of knowledge in ICT based applications. It is found from the table that the respondents relatively possess a higher level of awareness in using Windows 77.5% and MS Office Package 62.5% and others shown as table 5.

Table 6 Awareness of Library Automation software

Sr No	Library Automation Software	Excellent	Good	Poor	Don't Know	Don't Use	Total
1	LIBSYS	8	15	2	11	4	40
	%	20	37.5	5	27.5	10	100
2	KOHA	9	11	5	8	7	40
	%	22.5	27.5	12.5	20	17.5	100
3	SOUL	6	17	3	8	6	40
	%	15	42.5	7.5	20	15	100
4	LIBSOFT	1	6	7	18	8	40
	%	2.5	15	17.5	45	20	100
5	Local Made/Other Software	31	6	2	0	1	40
	%	77.5	15	5	0	2.5	100

Table 6 shows the level of awareness of library automation software among the librarians. Out of 40 respondents in engineering college libraries, respondents seem to be familiar more with local made and other software 77.5% followed by LIBSYS 37.5%. Among open source software, the librarians have more skill in using KOHA 27.5%. The librarian expressed their skills as poor in one of the software such as LIBSOFT 17.5%.

Table 8 Attitude towards the impact of ICT

Sr No	Attiitude	Agree	Disagree	Undecided	Total
1	ICT application facilitates quick access to current data	39	1	0	40
	%	97.5	2.5	0	100
2	ICT application help to enhance knowledge and skills of librarians	37	3	0	40
	%	92.5	7.5	0	100
3	ICT application improve quality of library services	37	3	0	40
	%	92.5	7.5	0	100
4	ICT application reduce workload of librarians	31	9	0	40
	%	77.5	22.5	0	100
5	ICT application increased job satisfaction of Librarians	34	5	1	40
	%	85	12.5	2.5	100
6	ICT Disturbs routine work of the library	22	17	1	40
	%	55	42.5	2.5	100
7	ICT affect regular budgeting provision	27	12	1	40
	%	67.5	30	2.5	100
8	Difficult to Copy with all the Jargon	30	7	3	40
	%	75	17.5	7.5	100
9	Not able to Update the technology of ICT in time	21	17	2	40
	%	52.5	42.5	5	100

Table-8 shows that the librarians have a positive attitude towards the application of ICT in libraries. Majority of the librarians agreed that ICT application facilitates quick access to current data

97.5%, helps to enhance knowledge and skills of librarians 92.5% and reduce workload of librarians 77.5%, Negative aspects listed, to the variables 'ICT disturbs routine work of the library' majority of the respondents 42.5% disagreed and Not able to update the technology of ICT in time 42.5% librarians are disagreed.

Table- 9 Constraints in Acquiring ICT Skills

Sr No	Constraints	Agree	Disagree	Undecided	Total
1	Inadequate training in ICT applications	35	4	1	40
	%	87.5	10	2.5	100
2	Non availability of consultation services	30	9	1	40
	%	75	22.5	2.5	100
3	Lack of updating ICT strategy	30	9	1	40
	%	75	22.5	2.5	100
4	Fear of ICT Applications	27	10	3	40
	%	67.5	25	7.5	100
5	Lack of Interest by the librarians	28	10	2	40
	%	70	25	5	100
6	Lack of support from the management	28	9	3	40
	%	70	22.5	7.5	100
7	Lack of professional recognition	24	12	4	40
	%	60	30	10	100
8	Limited opportunities	28	11	1	40
	%	70	27.5	2.5	100
9	Lack of sufficient staff in the library	33	6	1	40
	%	82.5	15	2.5	100
10	Financial Problems	31	5	4	40
	%	77.5	12.5	10	100
11	Overload of working hours	32	5	3	40
	%	80	12.5	7.5	100
12	Other Reasons	2	9	29	40
	%	5	22.5	72.5	100

Table 9 indicates that the maximum crucial constraint is the inadequate training in ICT applications 87.5%, Lack of sufficient staff in the library 82.5% librarians agree this constraint, financial problems is the any other constraint 77.5% librarians believe it and overload of working hours 80% librarians consider it. Fear of ICT Applications 67.5% librarians agree and lack of support from the management 70% librarians are agree.

SUGGESTIONS

I.The recurrent views and comments to be had by means of the librarians have enabled the investigator to signify some ability inspiration for the successful submission of ICT in libraries.

II.Adequate budget should be made available by way of the management for qualities of ICT infrastructure, digital resource development, and applications of ICT enabled offerings in engineering college libraries.

III.The management needs to evaluation their policies concerning the implementation of technological

developments in libraries.

IV.Libraries ought to inspire ICT awareness to the experts in addition to users by furnished that quick-term courses, in-residence training programmes, organizing workshops, seminars, meetings and public lectures.

V.Library users need to additionally accept idea through organizing orientation programmes in ICT.

VI.A new model curriculum for information science courses in engineering schools ought to be devised by integrating the traditional and modern knowledge and applications.

VII.ICT need to be a vital component thing of formal Library and records science schooling incorporating the skill and knowledge in coping with the digital libraries and application of ICT in libraries

CONCLUSION

ICT provides libraries a possibility to present fee-introduced records services and get admission to a extensive form of digital based information resources to their customers. In this modern state of affairs, whereby ICT are being steadily efficient and the conventional formats are being changed by digital formats, regular education for the librarians in changing era is predictable. In-residence training programmes are more efficient in libraries. From the existing survey it's far comprehensible that maximum of the ICT technology which are taken for this look at aren't but been added in the engineering college libraries. Consequently the librarians aren't in a scenario to apply those technologies in their work. This may create a low degree of technological skill development among the librarians working in these libraries. Concerning the implementation of the technology, lack of support from the authority is the foremost difficulty in engineering college libraries. The study concludes that the engineering college library needs proper ICT infrastructure and education to the librarians in the usage of the digital resources effectively.

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